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## **Explaining attitudes towards immigration policies in European countries: The role of human values**

Davidov, Eldad ; Meuleman, Bart

**Abstract:** European societies have been experiencing increasing rates of immigration in recent decades. At the same time one can observe a substantial rise in anti-foreigner sentiments. In this study we investigate the effect of human values on attitudes towards immigration. We hypothesise that self-transcendent individuals are more supportive of, and conservative individuals are more adverse to, immigration. We do not expect large differences in the effect of values across contexts. To explain cross-country and cross-time differences we use group threat theory, according to which larger inflows of immigration combined with challenging economic conditions impose a threat on the host society, resulting in more negative attitudes towards immigration. To test our hypotheses we use data from the first three rounds of the European Social Survey (2002–03, 2004–05 and 2006–07) and multilevel analysis. Prior to the interpretation of the results, we guarantee that the concepts display measurement invariance across countries and over time. Our results largely confirm our hypotheses regarding the role that values play in the explanation of anti-immigration attitudes.

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# Explaining attitudes towards immigration policies in European countries: The role of human values

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## **Explaining attitudes towards immigration policies in European countries: The role of human values**

### **Abstract**

European societies have been experiencing an increasing rate of immigration in the last decades. At the same time one can observe a substantial rise in anti-foreigner sentiments. In this study we investigate the effect of human values (Schwartz 1992) on attitudes towards immigration. We hypothesise that self transcendent individuals are more supportive of and conservative individuals are more adverse to immigration. We do not expect large differences in the effect of values across contexts. To explain cross-country and cross-time differences we use group threat theory, according to which larger inflows of immigration combined with challenging economic conditions impose threat on the host society resulting in more negative attitudes towards immigration. To test our hypotheses we use data from the first three rounds of the European Social Survey (2002-3, 2004-5 and 2006-7) and multilevel analysis. Prior to the interpretation of the results we guarantee that the concepts display measurement invariance across countries and over time. Our results largely confirm our hypotheses regarding the role that values play in the explanation of anti-immigration attitudes.

Key words: human values; self-transcendence and conservation; group threat theory; European Social Survey; attitudes towards immigration

## **Explaining attitudes towards immigration policies in European countries: The role of human values**

### **1. Introduction**

European societies have been experiencing an increasing rate of immigration in the last decades according to OECD data<sup>1</sup>. Between 1994 and 2004 the influx of immigration into the EU-15 has increased by more than 60 per cent (Davidov, Meuleman, Billiet and Schmidt 2008a). At the same time one can observe a substantial rise in anti-foreigner sentiments (Semyonov, Raijman and Gorodzeisky 2006). According to the Eurobarometer data (Survey 47.1), 33 per cent of all European citizens are considered to be racist (Scheepers, Gijssberts and Coenders 2002) and many still reject granting citizenship rights to immigrants' offspring (Raijman, Davidov, Schmidt and Hochman 2008). Thus it is crucial to understand how these negative attitudes towards immigrants in Europe in general and towards immigration in particular come about.

A review of the extensive theoretical and empirical literature on attitudes towards immigrants reveals that different theoretical perspectives were used in order to explain the formation of such attitudes. One line of research maintains that discriminatory attitudes towards immigrants are the product of the sociodemographic and socioeconomic characteristics of individuals. According to this view, labour market position, education and income are key determinants of negative attitudes (Kunovich 2004). Socially and economically vulnerable individuals will feel more threatened by the arrival of immigrants who typically compete for similar jobs and, consequently, display a higher tendency to reject immigration (Semyonov et al. 2006; Raijman, Semyonov and Schmidt 2003; Semyonov, Raijman and Yom-Tov 2002).

Quillian (1995; 1996 for the American context) has introduced another approach to explain variation in negative attitudes towards immigration. This second line of research

maintains that instead of focussing only on individual differences, one should examine *cross-country* variation in attitudes towards immigration. The size of the immigrant population and economic conditions (as indicated by the Gross Domestic Product per capita or the unemployment rate) are considered to have direct effects on attitudes towards immigration since they present important indications of threat and economic competition in the host society. Several studies have followed his approach and examined whether worse economic conditions and higher immigrant population exert more negative attitudes towards immigrants (Kunovich 2004; Scheepers et al. 2002; Gijsberts, Scheepers and Coenders 2004; Meuleman in press; Schlüter and Wagner 2008; Schneider 2008; Semyonov et al. 2006).

Far fewer studies have tried to link attitudes towards immigration with human values (for exceptions, see e.g. Sagiv and Schwartz 1995; Davidov et al. 2008a). This neglect is not surprising since the value concept has not yet received the place it deserves in sociology (Hitlin and Piliavin 2004). Furthermore, the value concept has suffered for many years from an absent valid scale to measure it (Davidov, Schmidt and Schwartz 2008b). However, this neglect is unfortunate because the theoretical importance of human values is uppermost for the explanation of attitudes in general, and attitudes towards immigration in particular. Human values are considered by Schwartz (1992) as general principles in life that form attitudes and opinions. Thus, they can be seen as a complementary key explanation of individual attitudes to the one provided by social structural position.

In this paper we scrutinise the possible role that value orientations might play in the formation of anti-immigration attitudes. We test our propositions empirically in several countries participating in the European Social Survey at three time points between 2002 and 2007. We try to contribute to the existing literature on the sources of negative attitudes towards immigration in Europe by combining less frequently used constructs – namely values – with other individual and contextual determinants of attitudes towards immigration in the explanation. Their effect is tested using a multilevel analysis. Furthermore, we utilise a large-

scale, high quality and internationally and longitudinally comparable data set that includes many European countries and three time points – the European Social Survey (ESS; Jowell et al. 2007). Measurement models for the theoretical constructs are tested taking measurement errors into account (Bollen 1989); and measurement equivalence of the theoretical constructs is tested across countries and over time (Billiet 2003). Before turning to the empirical part, we briefly describe the theoretical background and propositions.

## 2. Theoretical Background

### 2.1 The individual level

#### 2.1.1 The value theory

The key goal underlying the human values theory was to develop a comprehensive, universal and comparable set of values to allow measuring and comparing them in one country to those in any other country (Rokeach 1973; Schwartz 1992, 1994). Following this practical purpose, Schwartz defines values as ‘desirable transsituational goals, varying in importance, that serve as guiding principles in the life of a person or other social entity’ (Schwartz 1994: 21) and introduces a theory to describe them. Schwartz limits the number of individual values to ten motivationally distinct value types which are assumed to encompass the main value orientations across countries covering values found in earlier theories (e.g. Inglehart 1990; Rokeach 1973).

The ten value types proposed by Schwartz are universalism, benevolence, tradition, conformity, security, power, achievement, hedonism, stimulation and self-direction. Each value has a motivational background which defines it. For example, the motivation behind the value type universalism is understanding, appreciation, tolerance and protection for the welfare of all people and for nature. The motivational background of the tradition value is respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide. The theory also postulates dynamic relations between the values. These

dynamics are a result of the fact that values are interdependent. Pursuing one value may be congruent or stand in opposition to pursuing another value. For example, pursuing tradition values may be congruent with pursuing conformity and security values, but may stand in opposition to pursuing self-direction and stimulation values. As a consequence, some values are closer to each other and are expected to correlate positively and some values are further from each other and are expected to correlate negatively or not at all.

Schwartz (1992) views the values as organised in two bi-polar dimensions. On the first dimension, self-transcendence that includes the universalism and benevolence values opposes self-enhancement that includes the power and achievement values. On the second dimension, openness to change that includes the values stimulation and self-direction competes with conservation that includes the tradition, conformity and security values. Self-transcendence emphasises concern for the welfare and interests of others whereas self-enhancement involves pursuit of success and dominance over others. Openness to change involves independent action, thought, and feeling and readiness for new experiences whereas conservation emphasises self-restriction, order and resistance to change.

According to the theory, the values form a continuum in which the ten values constitute benchmarks of universal value types. However, in empirical studies, due to measurement restrictions it is not always possible to discern between all the ten types of values. Therefore it is often necessary to unify adjacent values like universalism and benevolence or tradition, conformity and security (Davidov et al. 2008b; Davidov 2008). However, this is consistent with the theory. Using the higher-order dimensions may prove itself to be useful both theoretically and empirically when not all ten values can be distinctively identified, especially when the relations between the values that are unified and other variables, such as attitudes towards immigration, are expected to be similar (Davidov et al. 2008a).

### 2.1.2 Relations between values and attitudes towards immigration



In this study we differentiate conceptually between values and attitudes. Values are defined by Schwartz as general and basic beliefs. We refer to attitudes as ‘an individual’s disposition to react with a certain degree of favourableness or unfavourableness to an object, behaviour, person, institution or event – or to any other discriminable aspect of the individual’s world’ (Ajzen 1993: 41; see also Rokeach 1968). In other words, values refer to general situations and are more abstract than attitudes, whereas attitudes refer to specific objects or situations. There is only a limited number of values (ten in the Schwartz theory) but as many attitudes as there are objects in the world. In this study, the object we refer to and towards which an attitude is formed is immigration and, more specifically, allowing immigrants into the country. This attitude is quite similar to the ethnocentrism concept (Sumner 1960).

Does it, from a theoretical point of view, make sense to use values to explain attitudes? Values are discussed by Hitlin and Piliavin (2004) as focussing on ideals designed in early phases of life that occupy a more central position in the self than attitudes. As such they are more stable over time than attitudes are. We expect attitudes to change in different contexts and situations but values to be more durable.

Values can also be seen as determining the weight that is given to different beliefs when an overall evaluation of an attitude object is made (Esses, Haddock and Zanna 1993). Following a similar line of reasoning, one can argue that values whose motivational goals are promoted or blocked by the realisation of a certain object will affect attitudes towards that object (Davidov et al. 2008a). In our present context we would expect that certain human values will affect attitudes towards immigration, if immigration has consequences that are relevant for the attainment of the motivational goals associated with these values.

Concrete expectations can be formulated regarding the relation between values and attitudes towards immigration. The motivational goals or preferences embedded in conservation values may be blocked by the arrival of immigrants (Sagiv and Schwartz 1995). Immigrants bring along changing traditions and norms and this may hinder pursuing

conservation values that include appreciation of stability of society, and respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide. In other words, the arrival of immigrants is coupled with potential societal changes that are opposite to the preferences of conservative individuals. Therefore, we expect conservative individuals to reject immigration.

On the other hand, the motivational goals or preferences embedded in self-transcendence values (especially universalism) are promoted by the arrival of immigrants (Sagiv and Schwartz 1995; Davidov et al. 2008a). Self-transcendence values include understanding, appreciation, tolerance and protection for the welfare of people and for nature. The arrival of immigrants provides opportunities for individuals to realise these self-transcendent values. In other words, the arrival of immigrants is coupled with potential societal changes that are in harmony with the preferences of self-transcendent individuals. Thus, we expect self-transcendent individuals to support immigration.

## 2.2 The contextual level

### 2.2.1 Group threat theory

Human values operate on the individual level. Therefore, we do not use values to explain cross-country differences in attitudes towards immigration. Instead, various models suggest that, according to group threat theory (Blalock 1967; Olzak 1992; Stephan and Stephan 1985), threat stemming from the arrival of immigrants and from bad economic conditions constitute central determinants of negative attitudes towards immigration (Kunovich 2004; Meuleman, Davidov and Billiet 2009; Quillian 1995; Raijman et al. 2003; Scheepers et al. 2002; Schlüter and Wagner 2008; Semyonov et al. 2006; Semyonov, Raijman, Yom-Tov and Schmidt 2004; Stephan et al. 2005). Citizens fear that more immigrants will mean more competition for scarce economic resources and thus loss of income sources and standard of living. Fear can also relate to loss of cultural identity or higher crime rates. A few recent studies suggest that it

is actually the increase or decrease in the number of immigrants in the country which shape threat (Coenders and Scheepers 1998, 2008; Meuleman et al. 2009; Quillian 1996). Thus, according to this view, a greater relative influx of immigrants into the country will bring about more negative attitudes towards immigration.

Economic conditions have also been recognised as shaping threat from immigration. Less favourable economic conditions make competition even more intense as resources become scarcer. Immigrants are blamed for producing unfair competition and for being a source of the declining economic conditions (Coenders, Gijsberts and Scheepers 2004; Semyonov et al. 2006). Thus, we expect that with worse economic conditions, attitudes towards immigration will be more negative.

### 2.3 Summary of our hypotheses

Our theoretical considerations lead us to the following hypotheses. We expect (*H1*) *individuals scoring high on self-transcendent values to display more positive attitudes towards immigration*. In contrast, (*H2*) *individuals scoring high on conservation values are expected to exert more negative attitudes*. On the macro-level, we expect that (*H3*) *attitudes towards immigration are more restrictive in countries and points in time with a strong relative inflow of immigrants*. Finally, we expect that (*H4*) *attitudes towards immigration are less restrictive in countries and points in time with a prosperous economic situation*. Finally, since Schwartz (1992) argues that his values are universal and display similar effects across countries and over time, we hypothesise that (*H5*) *there is no substantial difference in the effect of values on attitudes towards immigration across countries and time points*.

Empirical studies provide support for our hypotheses. On the individual level, American (Katz and Hass 1988; Pantoja 2006; Pettigrew 1959), Israeli (Sagiv and Schwartz 1995), Belgian (Duriez et al. 2002), and German (Iser and Schmidt 2005) studies provide empirical support for the relationships between values and attitudes towards immigration in these

countries. Davidov et al. (2008a) provide support for our hypotheses across a large set of European countries using data from the first ESS round. In this study, we go beyond the Davidov et al. study by investigating the hypotheses across a much larger data set and across three rounds of the ESS data to examine the robustness of these relations. Furthermore, we include contextual determinants of negative attitudes towards immigrants and test whether values display similar effects across countries and time points, or whether they interact with the contextual determinants in their explanation of negative attitudes towards immigration.

On the macro-level, empirical findings provide only mixed evidence. Several American (Semyonov, Haberfeld, Cohen and Lewin-Epstein 2000; Quillian 1996) and European (Kunovich 2004; Lahav 2004; Quillian 1995; Scheepers et al. 2002; Coenders et al. 2004) studies lend support to the relationship between increased size of the immigrant population, improved economic conditions and attitudes towards immigration. Some studies in the US context provided supportive findings (Quillian 1996) regarding the effect of the group size, whereas other studies in Europe found mixed evidence. Quillian (1995) and Scheepers et al. (2002) found an effect of the relative immigrant population size (measured as the percentage non-EU immigrants) in several European countries. However, Semyonov et al. (2004) found no such effect. Semyonov et al. (2006) found an effect of the relative immigrant population size in 12 European countries in 1988, 1994, 1997 but not in 2000. Strabac and Listhaug (2008) found no effect of the size of the Muslim population on threat due to Muslims. Regarding the economic conditions, Quillian (1995, 1996) finds an inverse relation between economic conditions and attitudes towards immigrants in Europe and the USA: the better the economic conditions, the less negative the attitudes. However, Scheepers et al. (2002) find no effect of unemployment rate in European countries on threat due to immigrants. Semyonov et al. (2006) finds some weak effects of gross domestic product (GDP) in the years included in their study.

Finally, regarding our last hypothesis, a previous study that analysed only the first round of the ESS and a subset of the countries included in the present study did not evidence large differences in the effects of self-transcendence and conservation on attitudes towards immigration across countries (Davidov et al 2008a). Thus, in the next section we are going to extend previous studies and test the hypotheses using cross-national, longitudinal large-scale and comparable data.

### 3. Data and measurements

#### 3.1 Data

We employ data from the first three rounds (2002/2003, 2004/2005 and 2006/2007) of the ESS (Jowell et al. 2007). Translation of the questionnaire into each native language followed the rigorous procedures suggested by Harkness, van de Vijver and Mohler (2003, ch. 3). For each of the European countries, respondents were selected by means of strict probability samples of the resident populations aged 15 years and older. Participants are interviewed regarding different social issues including their attitudes towards immigration and value priorities. Respondents also provided information on their sociodemographic characteristics. The countries participating in the analysis (and sample size pooled over three rounds in parentheses) are:<sup>2</sup> Austria (5,195), Belgium (4,311), Switzerland (4,350), Czech Republic (2,912), Germany (7,032), Denmark (3,924), Spain (3,331), Finland (4,708), France (1,568), United Kingdom (4,786), Hungary (3,493), Ireland (3,282), Italy (1,159), Luxembourg (873), Netherlands (5,231), Norway (4,500), Poland (4,355), Portugal (3,352), Sweden (4,211), Slovakia (2,453), thus making a total of 76,305 participants. Not all the countries participated in the three rounds.

#### 3.2 Variables

The dependent variable, attitudes towards immigration, is measured in the ESS by the willingness to allow immigrants into the country, referred to as *reject*. Each of the three items of this measurement scale inquires whether respondents would like their country to allow only a few or many immigrants of a certain group to come. These groups were people of the same race or ethnic group from most [country] people, people of a different race or ethnic group from most [country] people, and people from the poorer countries outside Europe. The answers of the respondents are registered on a 4-point scale (1 - allow many, 4 - allow none) so higher scores would indicate higher rejection of immigration. Scale variable *reject* is operationalised as the average over these three indicators. A multiple group confirmatory factor analysis (MGCFA: see Jöreskog 1971, Bollen 1989) suggests that the three questions load strongly on one factor in each country and at each time point.

The ESS includes 21 questions to measure the 10 values. Two questions are used to operationalise each value and three for universalism because of its broad content. This questionnaire is based on Schwartz' original 40-item portrait values questionnaire (PVQ; Schwartz et al. 2001). However, due to budgetary and time constraints, Schwartz shortened this battery of questions to allow its inclusion in the ESS. The questions describe a fictitious person, and the respondent is asked to rate the extent to which this person is or is not like him or her. Respondents answer on a 6-point rating scale ranging from 'very much like me' (1) to 'not like me at all' (6). Responses were recoded so that higher values would imply higher similarity. We employ the questions of the value dimensions *self-transcendence* and *conservation* (see footnote 2 and the ESS website for the precise item formulations). Self-transcendence is measured by five questions measuring the values universalism (importance of equality, understanding other people and looking after the environment) and benevolence (importance of helping other people and being loyal to friends). Conservation is measured by six questions measuring the values security (important to live in secure surroundings and that the government insures safety), conformity (important to follow rules and to behave properly)

and tradition (important to be modest and follow customs and religion). For each of the two value dimensions an index is constructed. Also for these two concepts, a multiple group confirmatory factor analysis suggests that each set of questions (those measuring self-transcendence and those measuring conservation) loads on one factor in all countries and at each time point.

We include several control variables that have been shown in previous studies to possess a significant effect on attitudes towards immigrants (Semyonov et al. 2006; Kunovich 2004). These variables include *education*, level of *religiosity*, *gender*, *age*, *income* and *left-right orientation*. *Education* level is coded as an ordinal variable, ranging from 0 (Not completed primary education) to 6 (Second stage of tertiary). *Religiosity* ranged from 0 = not at all religious to 10 = very religious. *Gender* is a dichotomous variable receiving the value of 1 for males and 2 for females. *Age* reports the age of the respondent. Household *income* was measured by the subjective rating of how respondents feel regarding their ability to live on the combined household income at present (ranging from 1 = very difficult on present income to 4 = living comfortably on present income). In our analyses, this variable was preferred to the objective household income variable because the latter had about 28% missing values. It was recoded so that higher values would imply higher levels of income. *Left-right* orientation was coded as 0 = left to 10 = right. The sociological literature leads us to expect that negative attitudes towards immigration would be more pronounced among older individuals with low levels of education and income, and among those with right-wing political orientation (Semyonov et al. 2006).

Finally, we chose two contextual variables in the study to test the hypotheses derived from group threat theory: *GDP per capita* and *inflow* of immigrants into the country (relative to the total population size). These two variables represent the competition threat and structural sources of negative attitudes towards immigration. We made use of GDP per capita to indicate the country's economic conditions (Quillian 1995). GDP per capita is reported in

thousands of dollars per capita with constant prices and constant power purchasing standards. The GDP per capita is considered a better indicator of economic conditions than the unemployment rate as it gives a better indication of the living standards in the country (Semyonov et al. 2006). Both context variables were retrieved from the OECD Statistics database (<http://stats.oecd.org/Index.aspx>).

To facilitate the interpretation of the results, the variables were transformed prior to the analysis. Conservation and self-transcendence were standardised per country time point separately (by centring around the country time point mean and dividing by the country time point standard deviation). This removal of higher-level variance in the values is necessary because we are interested in value-effects at the individual level only.<sup>3</sup> All other variables were standardized over the pooled data set (i.e. subtracting the pooled data mean and dividing by the pooled data standard deviation). As a consequence, parameter estimates can be interpreted as standardised effects (Snijders and Bosker 1994).

## 4. Results

### 4.1 Testing for invariance of the theoretical concepts

Before explaining attitudes towards immigration in a cross-country, cross-time context, it is first necessary to guarantee equivalence of the concepts used across countries and over time (Billiet 2003; Steenkamp and Baumgartner 1998). An MGCFA (Jöreskog 1971; Bollen 1989) analysis for 53 groups (countries within time points) with the program Amos 16.0 (Arbuckle 2007) guaranteed partial scalar invariance (Byrne, Shavelson and Muthen 1989; Steenkamp and Baumgartner 1998) for the concept 'Reject' and partial metric invariance for 'Self-transcendence' and 'Conservation'. This finding allows us to further compare the means of 'Allow' across countries and time points, to use these variables in a multilevel analysis, and to interpret the results meaningfully (Davidov 2010).



## 4.2 Descriptive overview

The distribution of the variable *reject* suggests a substantial amount of variance across countries. Turkey, Hungary and Portugal show the highest levels of resistance against further immigration into the country. At all time points, these countries score at least 2.70 on the REJECT scale. On the other side of the spectrum, the population of Sweden is most supportive of immigration, followed by Switzerland and Poland. Of all countries Sweden stands out, with rejection rates lower than 1.90 at all three time points. Given that *reject* is measured on a four-point scale, the differences between Sweden and countries with scores from the other side of the ranking are very large.

Rejection of immigration not only varies over countries, but also differs across time points. Interestingly enough, over-time evolution differs strongly from one country to another. In Switzerland, Hungary and the Netherlands, for example, there is a clear upward trend in anti-immigration attitudes. In Sweden and Poland, we witness precisely the inverse pattern. A figure displaying the distribution of the *reject* variable may be available from the authors upon request.

## 4.3 Multivariate analysis

In this section, we examine how we can explain the variation in the rejection of immigration, both at the individual level as well as between country time points. We explore the effects of values on the willingness to reject immigrants into the country controlling for other individual-level variables. We also test whether the effects of values vary across different contexts.

To account for the hierarchical data structure (75,000+ respondents are nested within 53 country time points), a multilevel modelling approach is taken. This makes it possible to include individual as well as context-level variables. The analysis is conducted in a step-wise fashion, in the sense that explanatory variables are added into the analyses in consecutive

blocks. After introducing classical sociodemographic predictors, the two value scales are added to the model. The analyses are conducted using the mixed procedure of SPSS 17.0 (SPSS 2007). Results are reported in Table 1.

Table 1 about here

Model 1 includes an intercept only. Of primary interest is the finding that 11 per cent of the variance of the variable *reject* is due to cross-country and cross-time differences. Thus, both individual-level and contextual-level variables may account for the variability in the variable *reject*.

In Model 2, rejection of immigration is regressed on individual sociodemographic predictors: education, religiosity, gender, age, income and left-right orientation. The drop in the model deviance ( $\Delta -2LL = 7447.67$ ) shows that the inclusion of these variables results in a substantial improvement of model fit. In line with previous research (Coenders and Scheepers 2003; Jackman and Muha 1984; Kunovich 2004), education turns out to have a strong tempering effect ( $\beta = -.198$ ) on anti-immigration attitudes. In other words, educated individuals have a lower tendency to reject immigration. Religiosity has also a negative effect ( $\beta = -.037$ ), implying that more religious individuals have a somewhat lower tendency to reject immigration. There is no difference between males and females with respect to attitudes towards immigration. Older individuals have a higher tendency to reject immigration ( $\beta = .129$ ). Subjective feeling of higher income results in lower rejection and stronger support of immigration ( $\beta = -.072$ ). Finally, right-wing orientation reinforces opposition to immigration ( $\beta = .130$ ). Judging by the size of the standardised effect parameters, educational level, political orientation and age are the strongest predictors for anti-immigration attitudes. In Model 2, both the individual and the contextual variances decrease by 9 per cent and 24 per cent respectively, meaning that our sociodemographic variables explain substantial portions of the variances at both levels.

In Model 3 the values scales are introduced into the model, thereby providing a test of the core hypotheses of this paper. Analyses reveal that self-transcendence exhibits a negative effect ( $\beta = -.188$ ) on rejection of immigration and conservation exhibits a positive effect ( $\beta = .184$ ). In other words, people who score higher on self-transcendence are more prone to support immigration, whereas individuals scoring high on conservation are more likely to object immigration. These results are strongly supportive of our two individual-level hypotheses regarding the effect of values. As the standardised parameters show, the predictive power of both value orientations is equally strong, and clearly stronger than that of most of the sociodemographic variables. The value effects operate over and beyond the effect of the control variables presented in Model 2, which retain their influence. Compared to Model 2, the only difference is that the gender became significant in Model 3 ( $\beta = .021$ ). This implies that, when controlling for gender-differences in value patterns, females display a slightly higher tendency to reject immigrants.<sup>4</sup> Yet we should not forget that from a substantive point of view, the gender effect is very small, and only significant due to the very large sample size. After including the values in the model, the individual-level variance decreases by additional 5 per cent. However, the two value orientations do not explain any variation at the macro-level. This is mainly due to the fact that value levels are quite equally spread over countries. Consistent with this finding, the model deviance was reduced even further ( $\Delta -2LL = 3479.99$ )

In Models 4 to 6 we tested our macro-level hypotheses with respect to group threat theory. In Model 4 we added the variables *inflow per capita* and *GDP per capita* into the model. These variables exerted no significant effect on the dependent variable. In other words, more competitive conditions on the country level did not result in higher levels of rejection of immigration.

In Model 5 random slopes are included for the two value scales. This makes it possible to examine to what extent the value effects vary regionally and longitudinally. After all,

although the values are found to be universal, the size of their *effects* may differ across contexts. The two random slope variances are indeed statistically significant, resulting in a further reduction of the model deviance ( $\Delta -2LL = 215.74$ ). Concretely, this means that the value effects vary significantly over countries and time points. Although the random slopes are statistically significant, the differences in value effects remain limited from a substantive point of view and should, thus, not be overrated. In the case of self-transcendence, for example, the standard deviation of the slope equals .055 (i.e. the square root of the variance). This means that the effect of self-transcendence in a country – time point combination deviates on average 0.052 from the overall effect (-.180). For the effect of conservation, the standard deviation is .049. Thus, even in strongly deviating contexts, the values still show the anticipated effects.

Finally, in Model 6 we wanted to find out whether differences in the effect of the values self-transcendence and conservation across countries and time points are related to differential levels of immigration inflow or economic conditions. To test this possibility, we formed four interaction variables: two of them were between *inflow per capita*, *GDP per capita*, and the value *conservation* (*conservation\*inflow/cap* and *conservation\*GDP/cap*), and two other interaction terms were between *inflow per capita*, *GDP* and the value *self-transcendence* (*self-transcendence\*inflow/cap* and *self-transcendence\*GDP/cap*). Table 1 displays the results of these interaction effects in Model 6.

The interaction term between conservation and GDP displayed a small significant and positive effect ( $\beta = .024$ ). This suggests that in countries and in time points with more favourable economic conditions, the positive effect of conservation on rejection of immigration is a little more pronounced, while conservation plays a more limited role in less prosperous contexts. It could be the case that conservatives living in prosperous countries are even more anxious due to immigration because they fear that new immigrants will endanger the economic prosperity of their country. An alternative explanation might be that, in

prosperous contexts, the debate for or against restrictive immigration policies is a rather theoretically based discussion, without tangible consequences for the day-to-day life of most persons. In such contexts, it seems plausible that abstract principles, such as conservation values, play a greater role in attitude formation. In more competitive contexts, on the other hand, we might expect that anti-immigration attitudes come to depend less on conservation values and more on personal experiences and individual vulnerability for ethnic competition. However, further research is needed to give a more decisive answer on this point.

The interaction effect between conservation and inflow of immigrants was found to be insignificant, indicating that the positive effect of conservation does not vary systematically across countries and time points with low and high levels of immigration. For self-transcendence, both interaction terms were insignificant. Self-transcendence thus seems to display similar effects in countries and time points with different economic conditions and levels of immigration. In this final model we observed a further albeit smaller reduction in model deviance ( $\Delta -2LL = 18.15$ ).

In sum, results indicate that the effect of values is robust and that the size of the interaction effects is relatively small. Therefore, value effects are rather similar across countries and time points, largely confirming the fifth hypothesis.

## 5. Summary and conclusions

European societies have experienced an increasing rate of immigration in the last decades. The demographic trend moves towards higher rates of immigrants in Europe. At the same time, Europeans display negative attitudes towards immigrants in general and immigration in particular. Therefore, it is crucial to understand how such attitudes come about.

Previous studies have focussed on sociodemographic variables to explain negative attitudes towards immigrants. In this study, we suggested to focus on the effect of human values (Schwartz 1992) on such attitudes. The role of human values in the explanation of

attitudes, opinions and behaviour has been underestimated in sociology. One of the reasons for this has been the absence of an agreed-upon scale to measure them. The inclusion of a shortened version of the PVQ (Schwartz et al. 2001) in the European Social Survey since 2002 enables us to examine what role values may play in the explanation of attitudes towards immigrants in different countries and time points. To examine differences in the rejection of immigration across countries and three time points between 2002 and 2007 we utilised the group threat theory approach (Quillian 1995; Scheepers et al. 2002).

Before analysing the causal relations between values and rejection of immigrants, we examined the comparability of the value concepts and of the construct ‘rejection of immigrants’ across countries and over time. Partial scalar invariance (Byrne, Shavelson and Muthén 1989; Steenkamp and Baumgartner 1998) was guaranteed for the concept ‘Reject’ and partial metric invariance for ‘Self-transcendence’ and ‘Conservation’. This enabled us to draw meaningful conclusions in the multivariate analyses.

On the individual-level, the effect of education was the strongest one among the sociodemographic variables. This finding has also been evidenced in past studies (Coenders and Scheepers 2003; Jackman and Muha 1984; Kunovich 2004). However, the most important result we obtained in the multivariate analysis on the individual level indicated that values have a substantial influence on rejection of immigrants after controlling for the effect of sociodemographic characteristics. In fact, the effects of self-transcendence and conservation, the two values included in the model, were the strongest in standardised terms. Self-transcendent individuals displayed lower tendencies to reject immigration whereas conservative individuals rejected immigration more strongly. These results supported our first two hypotheses. The effects of the values also turned out to be rather similar across countries and time points supporting the fifth hypothesis. Thus, it is shown, for the first time with such large scale data, that values contribute largely to the explanation of anti-immigration attitudes.

This may be relevant for policies designed to change public opinion about immigration. When policies for increasing public support for immigration are considered, values within the population should be seriously taken into account as part of the explanation. Even though value preferences are acquired during early life and are very difficult to change, they may be changed or influenced during earlier life phases, for example, through the education system. The finding regarding the effect of the values is also in line with Icek Ajzen's (2005) postulation that values' effect on attitudes is not part of the theory of planned behaviour, but 'can complement it... and thereby deepen our understanding of a behavior's determinants' (Ajzen 2005: 134).

It should be noted that we used unified value concepts. Self-transcendence includes the values universalism and benevolence and conservation includes the values security, conformity and tradition. In trying to explain opinions, attitudes or behaviour, also the single values may be utilised. The decision whether to use single values or unified ones depends on the research question. However, it may also depend on measurement restrictions. When there are not enough questions to measure single values, the unified values may be used because they are similar to the continuum of the colours of a rainbow (Davidov et al. 2008b). The European Social Survey, with its 21 questions to measure human values, enables this kind of work more than before.

We used group threat theory to explain cross-country and longitudinal differences in the rejection of immigration (see also Meuleman in press; Quillian 1995; Scheepers et al. 2002; Schlüter and Wagner 2008; Semyonov et al. 2006). However, we found that these differences could not be accounted for by economic conditions and relative size of immigration flows. Improved economy or lower levels of immigration cannot necessarily guarantee more public support for immigration. This finding is in contradiction with several previous studies (e.g. Quillian 1995; Scheepers et al. 2002; Semyonov et al. 2006). However, our study is not the first in which the relations between economic conditions, size of immigrant population and

anti-immigrant attitudes are not confirmed (e.g. Sides and Citrin 2007; Strabac and Listhaug 2008). This mixed evidence could be due to methodological issues, such as the small number of countries involved, cross-cultural inequivalence of measurements in previous studies or the concrete operationalization of the context variables. Furthermore, recent studies suggest that in times of increasing mass media coverage, it is the mass media reports that may play an increasingly decisive role in the formation of public opinion towards a plethora of issues including immigration policies. This notion has nevertheless received comparatively little systematic empirical attention—a fact resulting possibly from the lack of adequate data sources (Schlüter and Davidov 2009). Thus, future studies should try to address possible additional contextual sources of unfavourable attitudes towards immigration.

In sum, societal pluralism and immigration may not be taken for granted. Even though immigration rates have increased substantially in Europe over the last decades, Europeans reject these immigration waves for various reasons. Understanding why these negative attitudes come about is an important task that may provide tools for policy makers to combat such attitudes. Our study provides support for the strong continental effect of certain human values on such attitudes.



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Table 1. Multilevel models explaining the variable *Reject*

	Model1			Model2			Model3			Model4			Model5			Model6		
Fixed effects	Par.		SE	Par.		SE	Par.		SE	Par.		SE	Par.		SE	Par.		SE
Intercept	-0.042		0.044	-0.028		0.039	-0.023		0.039	-0.024		0.038	-0.024		0.038	-0.024		0.038
<b>Sociodemographic variables</b>																		
Education				-0.198	***	0.004	-0.162	***	0.003	-0.162	***	0.003	-0.162	***	0.003	-0.162	***	0.003
Religiosity				-0.037	***	0.004	-0.046	***	0.004	-0.046	***	0.004	-0.045	***	0.004	-0.045	***	0.004
Gender				0.006		0.003	0.021	***	0.003	0.021	***	0.003	0.022	***	0.003	0.022	***	0.003
Age				0.129	***	0.004	0.092	***	0.004	0.092	***	0.004	0.092	***	0.004	0.092	***	0.004
Income				-0.072	***	0.004	-0.070	***	0.004	-0.070	***	0.004	-0.070	***	0.004	-0.070	***	0.004
Left-right				0.130	***	0.003	0.099	***	0.003	0.099	***	0.003	0.098	***	0.003	0.098	***	0.003
<b>Values</b>																		
Self-transcendence							-0.188	***	0.004	-0.188	***	0.004	-0.180	***	0.008	-0.180	***	0.008
Conservation							0.184	***	0.004	0.184	***	0.004	0.178	***	0.008	0.177	***	0.007
<b>Macro variables</b>																		
Inflow/cap										0.003		0.048	0.004		0.048	0.004		0.048
GDP/cap										-0.079		0.048	-0.079		0.048	-0.079		0.048
CON*Inflow/cap																0.008		0.008
CON*GDP/cap																0.024	**	0.008
ST*Inflow/cap																-0.005		0.010
ST*GDP/cap																-0.005		0.010
<b>Random effects</b>	Par.		SE	Par.		SE	Par.		SE	Par.		SE	Par.		SE	Par.		SE
Residual variance	0.861	***	0.004	0.780	***	0.004	0.745	***	0.004	0.745	***	0.004	0.741	***	0.004	0.741	***	0.004
Random intercept	0.103	***	0.020	0.078	***	0.015	0.081	***	0.016	0.075	***	0.015	0.075	***	0.015	0.075	***	0.015
Slope Self-trans.													0.003	***	0.001	0.003	***	0.001
Slope Conservation													0.002	***	0.001	0.002	**	0.000
<b>Explained variance</b>																		
% reduced variance residual				0.09			0.14			0.14			0.14			0.14		
% reduced variance intercept				0.24			0.21			0.27			0.28			0.28		
<b>Model comparison</b>																		
-2LogLikelihood	202638.56			195190.89			191710.89			191706.65			191490.91			191472.76		
$\Delta$ -2LogLikelihood				7447.67			3479.99			4.24			215.74			18.15		
$\Delta$ df				6			2			2			2			4		
p-value				0.0000			0.0000			0.1200			0.0000			0.0012		

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$ ; All variables were standardised prior to analysis (Snijders and Bosker 1994); ICC = 11 per cent.

Par. = parameter; SE = standard error; CON = Conservation; ST = Self-transcendence; cap = capita.



## Endnotes:

<sup>1</sup> See website: <http://www.oecd.org/home>

<sup>2</sup> The data for the analysis were taken from the website <http://ess.nsd.uib.no>. Details on data collection techniques in each country are documented in the website <http://www.europeansocialsurvey.org>. The figures refer to the number of respondents without missing values on the variables included in the models.

<sup>3</sup> We would like to thank an anonymous reviewer for this suggestion.

<sup>4</sup> Without controlling for value orientations, the fact that women tend to give higher priority to self-transcendence values masks this gender effect.